

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/40872

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: C09K 3/00( 2006.01)  
C12Q 1/68( 2006.01);G01N 33/53( 2006.01)

USPC: 516/135;435/6,7.1

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 516/135; 435/6, 7.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WEST (US-PGPUB; USPAT; EPO; JPO; DERWENT); NCBI PUBMED

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FANG et al. Membrane Protein Microarrays. J. Am. Chem. Soc. Vol. 124, No. 11. 2002. pages 2394-2395.	1-32
A	YANG et al. Fabrication of Phospholipid Bilayer-Coated Microchannels for On-Chip Immunoassays. Analytical Chemistry. Vol. 73, No. 2. 2001. pages 165-169.	1-32
A	ANDERSON et al. Insights into phase transition kinetics from colloid science. Nature. Vol. 416. 2002. pages 811-815.	1-32
A	MBAMALA et al. Charged colloids and proteins at an air-water interface: The effect of dielectric substrates on interaction and phase behavior. Physical Review. 67. 2003. pages 031608-01-10.	1-32
A	YETHIRAJ et al. A colloidal model system with an interaction tunable from hard sphere to soft and dipolar. Nature. Vol. 421. 2003, pages 513-517.	1-32

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

## Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

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"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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Date of the actual completion of the international search

22 September 2006 (22.09.2006)

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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KUNNEKE et al. Visualization of Molecular Recognition Events on Microstructured Lipid-Membrane Compartments by In Situ Scanning Force Microscopy. Angew. Chem. Int. Ed. 41, No. 2, 2002, pages 314-316.	1-32
X	TANG et al. Single nucleotide polymorphisms (SNPs) assay using reversible association and dispersion of DNA-linked colloidal nanoparticles. Nucleic Acids Research Supplement No. 1, 2001, oages 165-6.	1, 7, 8, 10, 11, 13, 14, 18, 25, 26, 27, 28, 30, 32